California Food Guide

Health and Dietary Issues Affecting Latinos

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What's New?

Latinos comprise one of the fastest growing sectors of California's population. In 2000, Latinos represented 32.4 percent of the state's population, with people of Mexican descent comprising 25 percent of the total state population.[1]

Public Health Implications

Compared to Latinos in the rest of the United States, relatively more of California's Latinos are recent immigrants, non-citizens, and of Mexican or Central American descent.[2] Nevertheless, the Latino population is culturally, ethnically, and racially diverse. In addition to country of origin, levels of education and acculturation influence dietary patterns and health profile of this population. These facts must be appreciated to work effectively with this population.

Definition

There has been considerable debate about the appropriate name (e.g. Latino vs. Hispanic) to refer to this population.[3] Previously, some have argued that "Latino" is more appropriate than "Hispanic" to refer to a population with national origins mostly from Latin America and the Caribbean. However, many surveys have found that the preferred form of ethnic self-identification is actually through specific national origin, such as Mexican, Mexican American, Puerto Rican, Cuban, Dominican, etc. Given the increasing rates of intermarriage among Latino subgroups, questions regarding the meaning and usefulness of these identifiers will likely continue in the 21st century.

Traditional Food Patterns

Although the use of beans, rice, and hearty stews or soups is common in many parts of Latin America and the Caribbean, traditional food patterns vary widely across, and even

within, countries of this region.[4, 5] Reflecting Spanish and Indian influences, the traditional Mexican diet is based on corn, beans, squash, and chili but also includes dairy products, meats, and other foods introduced from Spain. In the northern wheat-growing region of Mexico, flour tortillas, rather than corn, are common. By food group, traditional Mexican foods may include: 1) Grains--corn tortillas, flour tortillas, gruels (*atole),* wheat rolls, pasta, oatmeal, and rice; 2) Fruits--banana, guava, orange, lime, mango, papaya, melon, strawberries, pineapple, cactus fruit (*tunas),* and avocado; 3) Vegetables--chilies, tomatoes, onions, potatoes, tomatillos, zucchini and other squashes (both fruit and flowers), jicama, cabbage, cactus leaves (*nopales),* carrots, peas, chayote, purslane, and other wild greens; 4) Milk and milk products—cow's and goat's milk, cheese, evaporated milk, custard (*flan)*; and 5) Meat--legumes (pinto beans, garbanzo, lentils), chicken, beef, pork, eggs, seafood/fish, and pumpkin and sesame seeds.

Unlike Mexicans, Puerto Ricans have not traditionally eaten hot, spicy dishes and use plantains, red kidney beans, rice, and starchy tubers to a greater extent. Puerto Rican soups and stews are often made with a *sofrito* base, which is a mixture of chopped onions, peppers, cilantro, garlic, and tomato sauce.

The Salvadoran diet is based on beans, rice, corn, and vegetables. Salvadoran tortillas are thicker and smaller than those of Mexico. Use of black beans appears to be more common in Central America than in Mexico. A traditional Salvadoran food is the *pupusa*, which may consist of a tortilla stuffed with fried chicken strips or beans and cheese.

The traditional Colombian diet is based on rice, meat, vegetables, beans, plantains, and yucca root. The *arepa*, is a corn-based staple that, depending on the region of Colombia, may contain corn flour or fresh corn, cheese, eggs, legumes, and starchy vegetables. Due to the tropical climate year-round, an abundance of tropical fruits is consumed daily, primarily as beverages (water or milk-based). In some countries, such as Peru, potatoes are the staple.

Trends/Contributing Factors

A discussion of traditional dietary practices in subgroups of the Latino population is only a starting place for understanding Latino food patterns in the United States. A number of studies have reported profound dietary changes after immigration to the United States and between first and second or higher generation Latinos.[6, 7, 8, 9] Some key findings from more recent studies in California include the following:

- During pregnancy, Mexican-born women have diets higher in calories, fiber, vitamin A, vitamin C, vitamin E, folate, calcium, and zinc than United States born Mexican American women. Increasing years of residence in the United States is associated with lower intakes from food of fiber, folate, iron, and zinc among pregnant women of Mexican descent.[10]

- A survey in Monterey County found that a higher level of acculturation, as measured by years of United States residence or birthplace, is one of the strongest factors related to obesity in Latino adults living in the community.[11] In that study, greater consumption of high fat snack and fried foods and lower levels of physical activity were associated with obesity. Over the past decade, prevalence of obesity has increased by 47-48 percent among Latino women and men in the community and by 91 percent among men in the labor camp.[12]

As Latino immigrants have adopted the United States diet and lifestyle, their risk of diabetes has also increased. While genetic factors clearly play a role in determining risk of type two diabetes, the San Antonio Heart Study found numerous environmental factors, including diet and exercise, to be linked to greater risk of diabetes in Mexican-Americans, compared to their urban counterparts in Mexico City.[13, 14] This research also found that as Mexican-Americans become more affluent and educated, they are able to take steps to reduce their risk of obesity and diabetes. Although these findings are from older studies, more recent data, collected in California, indicate that higher socioeconomic status is associated with lower body mass index in Latinos.[8]

Another finding associated with Latina acculturation in the United States is decreased incidence and duration of breastfeeding. Infants of United States born Latinas are breastfed less than infants of non United States born mothers, and therefore both mother and child do not receive the health-protective benefits of breastfeeding. A large survey conducted in Los Angeles County, California, found that United States born Latinas were less likely to initiate breastfeeding (73 percent) than those not born in the United States (86 percent). United States born Latinas were also less likely to breastfeed at least six months (29 percent) than non-United States born Latinas (47percent).[15]

Differences in dietary patterns are evident among Latino adults and youth, with some behaviors placing the younger generation at increased risk of chronic disease.[8]
For example, about 32 percent of Latino adolescents in the 2001 California Health Interview Survey reported drinking two or more glasses of soda a day.[16] In Latino children who are overweight, high intake of sugar and sweetened beverages has been associated with early signs of poor beta cell function.[17] These early changes in pancreatic function are of particular concern in this population, and puts Latino children

at high risk for type 2 diabetes. The body of literature on food habits, dietary change, acculturation, and health in Latino populations may at times appear to be conflicting. Studies published in the 80s and even early 90s may not reflect the impact of more recent trends in Latin America. With global changes in the food supply, urbanization and aging of the population type 2 diabetes is expected to increase by 38 percent in Latin America over the next 10 years.[18] Up to 40 percent of the new cases may already have chronic complications at the time of their diagnosis. Mexican health experts are concerned about increasing rates of obesity and chronic disease in Mexico. Therefore, it is very important for public health professionals in the United States to recognize the emerging problem of deterioration in diet and health status that may occur in some immigrant populations before they arrive in the United States.

Burden

In the Latino population, high rates of poverty have not always translated into poorer dietary intakes and health status, which are often found in other low-income groups.[19] This paradox may possibly be due to strong family support and other protective cultural factors found in many less acculturated, recent immigrants from Latin America. There is some conflicting evidence as to whether or not Latino diets in the United States are higher in fat or lower in fruit and vegetables than those of the general population.[19, 20] Differences in age (or generation) and level of acculturation of the samples may account for some of the conflicting findings across studies. Compared to Whites and African Americans, Latinos nationwide have lower age-adjusted death rates from heart disease and many types of cancer.[21] However, rates of stomach, liver, gall bladder, and cervical cancer are higher in Latino than White populations.[22] Compared to non-Latino Whites and Asians (but not African Americans), Latinos have higher death rates from diabetes, and these rates have increased over time.[21]

Incidence and Prevalence

Prevalence of overweight and obesity is higher in Latino adults and children than in the non-Latino White population.[21] Longer length of residence in the United States, or being United States born, increases the risk of obesity and diabetes.[11, 23] In 1999-02, 71.4 percent of Mexican American women and 74.1 percent of Mexican American men were overweight or obese, compared to 57 percent and 69.5 percent of non-Latino White women and men, respectively.[21] Of particular concern is the increase in prevalence of overweight among Mexican American boys, ages 6-11 years, from 17.5 percent in 1988-94 to 26 percent in 1999-02. Prevalence of overweight among Mexican-American girls increased from 15.3 percent to 17.1 percent over that same time period. In general, lack of physical activity, high consumption of sweetened

beverages, and skipping breakfast appear to contribute to disparities in overweight among teenagers from poor and non-poor families.[24] Among Latino youth, skipping breakfast or lunch and watching TV/videos for three or more hours daily is associated with overweight.[25]

Other risk factors, including hypertension and metabolic syndrome, are also higher in the Latino population, compared to the non-Latino White population.[21, 26] Using the International Diabetes Federation definition of metabolic syndrome, prevalence of metabolic syndrome in 1999-02 was 50.6 percent in Mexican-American men and 46 percent in Mexican-American women, compared to 41.9 percent non-Latino White men and 34.4 percent in White women.

Despite differences in income and access to prenatal care, the rate of low birth weight in Mexican American mothers (6.28 percent) is slightly lower than that of non-Latino White mothers (7.02 percent).[21] However, the prevalence of low birth weight is particularly high (10.1 percent) among Puerto Rican mothers. Incidence of neural tube defects is higher in Latino than in White and African American populations,[27] and folic acid fortification efforts may not entirely reduce this disparity.[28, 29]

National data show that breastfeeding rates are higher among Latino women (76 percent) than non-Latino White (68.7 percent) or African American mothers (45.3 percent).[21] More Latino mothers continue breastfeeding for at least three months or more (54.3 percent), compared to non-Latino White (49.7 percent) or African American mothers (33.7 percent). Although the latest recommendations are to breastfeed exclusively for the first six months of life, the Feeding Infants and Toddlers Study found that only 14 percent of Latino infants are breastfeeding exclusively at four and five months of age.[30]

“Any” initiation breastfeeding may be a misleading indicator, as we see that women who begin breastfeeding with both bottle and breast, have a lower “exclusive” duration breastfeeding rate, and research shows that it is exclusive breastfeeding that produces the best health outcomes.[31] In 2004, the California Newborn Screening Test form, which is completed after an infant’s birth, showed that 29 percent of Latina women exclusively breastfed in comparison to the 40.5 percent state average. The national low “exclusive” breastfeeding duration data for Latinas is consistent with California specific data. In 2004, The Maternal and Infant Health Assessment reported that 36.6 percent of Latina women were still exclusively breastfeeding in comparison to the 42.2 percent state average.[32] As Latino babies are over 51 percent of the births in California, this lack of exclusive breastfeeding will affect the health of a great many children in the state. See the “Normal Infant Feeding Chapter” for tables on breastfeeding initiation and duration.

Prevalence of iron deficiency is higher in young Mexican-American than in White or African American children. Prolonged bottle-feeding may be partly responsible for the high prevalence in this group. At 24-48 months of age, 36.8 percent of Mexican-American children are still bottle-fed, compared to 16.9 percent of White and 13.8 percent of African American children.[33]

Barriers to Implementation/Myths

Lack of health insurance and access to care is an important barrier in this population. In addition to receiving inadequate care for health problems, uninsured and underinsured populations also lack preventive health services. Among Latino men, discussing weight and exercise with a health care provider is associated with more accurate self-perception of weight and efforts to lose weight.[11] This finding suggests that greater access to health care can increase awareness of the need to make lifestyle changes to prevent health problems. Nationwide, Mexican-American adults have the highest percentage (37.8 percent) lacking health insurance, compared to non-Latino White (16 percent), African American (18 percent), and Puerto Rican (17.9 percent) adults.[34] Approximately 40 percent of the Latinos in California are uninsured. Even among those having health insurance, many other factors impede access, including lack of Spanish-speaking, culturally competent staff; availability of evening appointments and transportation; and lack of culturally and linguistically appropriate written materials.

Food insecurity is prevalent among low-income Latino households and poses a barrier to improving nutrition. In the 2003 California Health Interview Survey, 38.2 percent of low-income Latino respondents reported food insecurity (with or without hunger), compared to 28.1 percent of the White sample.[35] Food insecurity is seasonal (often worse in the winter) and exacerbated by limited transportation. Some immigrants are also confused about the selection of foods in United States supermarkets (i.e., how to select the most nutritious item for the best price).[36] Supplies of fruits and vegetables are particularly low in food insecure Latino households.[37] Another aspect that needs to be considered is that many Latino immigrants have experienced past food deprivation in their home countries.[38] Seasonal patterns of food insecurity, especially where a history of past food insecurity exists, may set the stage for over consumption during times when food supplies and income are less limited.[39]

Due to relatively high rates of poverty, Latino families are more likely than Whites to live in poor neighborhoods that may pose additional barriers to improving health.[3] Some of these environmental barriers include fewer supermarkets, high crime rates that discourage outdoor activities, and an abundance of fast food restaurants.[40]

Nevertheless, in low-income communities with a high concentration of Latino households, traditional Latino culture and values have been shown to positively influence diets.[41, 42] Thus, in designing environmental interventions, it is important to build on cultural strengths in Latino communities.

Common Concerns/Strategies

- Successful interventions need to consider not only the diversity in diet due to country of origin but also to education and acculturation levels of the target group.[43] For example, messages targeting recent immigrants with less than a sixth grade education should encourage people to retain some traditional foods, such as legumes and mixed dishes with vegetables, while including healthful new foods like olive oil, canola oil, and low-fat dairy products. With this group, like many other low-income and/or limited literacy audiences, less emphasis should be placed on use of written materials (even in Spanish) and more on cooking demonstrations; small group discussion; other interactive activities; and colorful, pictorial aids.

- Second- and higher generation Latinos may use Spanish very little, if at all. Some have long abandoned the traditional recipes of their parents and grandparents and are not likely to return to that style of eating. Yet, this group may still identify with elements of their Latino culture and respond to more mainstream messages packaged with a Latino flair.

- Educational materials should be culturally-adapted and tested with the target group, not merely translated from English into Spanish. Some excellent materials developed in other states may have very limited use among some of California's Latino populations due to differences in regional food habits and Spanish usage. For example, Spanish words for specific foods vary in different Latin American countries.

- Many Latinos are concerned about improving the health of their families. Although recent immigrants may acknowledge that diet can affect health, fewer are able to explain how breastfeeding or vegetables and fruits are protective. Yet, many want more specific guidance on choosing healthful diets for themselves and their families. Guidance must also consider that this audience also faces time and cost constraints in choosing and preparing a healthful diet.

- Nutrition interventions may be more effective if they also incorporate information on stress reduction and management.[44] Among some Latino subgroups, emotional stressors (referred to as *susto*) are perceived to be causally related to onset of

illness and chronic disease. Even among Latino schoolchildren, stress has been associated with unhealthy eating patterns.[45]

- Interventions should aim to reach the entire family, even if different channels must be used. A focus on changing individual behavior is less likely to be effective than emphasizing the benefits of change at the family level. Assuming that the Latino woman is the gatekeeper of her family's nutrition may not be valid. A California study recently reported that shared meal decision-making among members of Latino households results in poorer quality diets (i.e., more fast food, lower fiber, higher saturated fat).[46] To help Latino families improve nutrition, health professionals must explore avenues to reach children, husbands, and other relatives directly.

- Community-level interventions are needed to make it easier for Latino populations to adopt healthier lifestyles through greater access to healthy foods and more physical activity. Engaging community members to develop these interventions and building on cultural strengths is critical to success.

Opportunities for Improvement

Opportunities for improvement among Latino populations in California and elsewhere include the following:

- More research is needed on the food practices and nutrition issues of certain Latino populations, particularly farm workers, recent immigrants, and rural Latinos. Among those who seasonally travel across the border into Mexico, the burden of infectious disease, including parasites, on nutritional status needs more attention. Research should determine and evaluate culturally sensitive, effective approaches to obesity and diabetes prevention.

- Health professionals at all levels need training in delivery of culturally competent services, particularly related to diabetes and other conditions common in this population. More Latino students should be recruited and trained to become health care providers. Culturally sensitive outreach programs to prevent obesity and diabetes should be designed to meet the needs of diverse Latino audiences, especially young parents and those with different levels of acculturation.

- Greater access to health care is needed for both uninsured and underinsured groups.

- Efforts must be made to address environmental and community issues. In particular

increased access to healthy foods through retail stores, farmers markets, and family-owned Latino stores and increased access to more safe and affordable ways to be physically active.

Clinical Implications

Global trends indicate that obesity and chronic disease are on the rise in Latin America. This trend has implications for the health of newly arrived immigrants from those countries. Increasing access to culturally competent health care services is critical in the Latino population.

Resources/Web Sites

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